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# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

PUBLICATION NUMBER : 03274479  
PUBLICATION DATE : 05-12-91

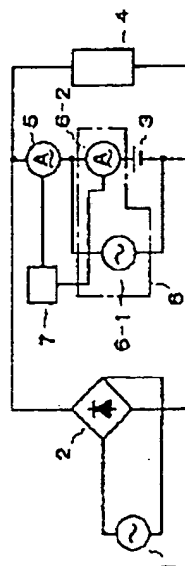
APPLICATION DATE : 26-03-90  
APPLICATION NUMBER : 02077440

APPLICANT : YUASA CORP;

INVENTOR : YAMANAKA MASAO;

INT.CL. : G01R 31/36

TITLE : METHOD OF DETERMINING LIFETIME  
OF LEAD STORAGE BATTERY



ABSTRACT : PURPOSE: To enable accurate judgement of the lifetime of a lead storage battery employed in a floating charged state by measuring an internal impedance of the lead storage battery by subtracting a measured current of an internal impedance measurer from a ripple current contained in a charging current and by dividing a measured voltage of the internal impedance measurer by a difference current.

CONSTITUTION: A ripple current contained in a charging current of a lead storage battery 3 connected in a floating charged state through a rectifier 2 is subtracted from a measured current of an internal impedance measurer 6. In other words, an AC ammeter is inserted into a charging circuit of the lead storage battery 3 and a measured value of this AC ammeter 5 and a measured value of an AC ammeter 6-2 of the internal impedance measurer 6 are inputted to a subtractor 7, so as to calculate a difference current. Then, the measured voltage of the internal impedance measurer 6 is divided by this difference current and a value thus obtained is indicated as an internal impedance. By this constitution, the internal impedance in the floating charged state can be measured accurately.

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